We Claim:

1. A method of using radio frequency waves to imitate the presence of a catalyst and artificially create catalytic action in a catalyst-free chemical reaction comprising:

transmitting radio frequency waves through the reaction mixture at a signal strength sufficient to electronically reproduce the effect of the physical presence of a selected catalyst, wherein the radio frequency waves have a selected transmission frequency substantially equal to the signal frequency of said selected catalyst as determined by nuclear magnetic resonance.

- A method according to claim 1 comprising:
 fine tuning the transmission frequency while monitoring the reaction to optimize the reaction.
- 3. A method according to claim 1 comprising:

 fine tuning the signal strength while monitoring the reaction to optimize the reaction.
- 4. A method according to claim 1 wherein the catalyst-free chemical reaction is electrolysis carried out within an electrolytic cell comprising a cathode and an anode each communicating with a source of electrical current and each immersed in an electrolyte substance.
- 5. A method according to claim 4 wherein the radio frequency waves are transmitted via a standing wave antennae submerged in the electrolyte.
- 6. A method according to claim 5 wherein the electrolytic cell is housed within a conduit and electrolyte is pumped through the conduit.
- 7. A method according to claim 6 further including the step of regulating the temperature of the electrolyte to optimize the reaction.

- 8. A method according to claim 6 wherein the electrolyte is water and the reaction comprises electrolysis to increase the dissolved oxygen gas within the water.
- 9. A method according to claim 8 further including the step of monitoring the dissolved oxygen concentration of the water passed from the electrolytic cell.
- 10. A method according to claim 1 wherein the selected catalyst is selected from the group consisting of: platinum; rhenium; iridium; and ruthenium.
- 11. A method according to claim 10 wherein the selected catalyst is platinum and the transmission frequency is in the order of 9.29 megahertz.
- 12. A method of using radio frequency waves to imitate the presence of an inert metallic catalyst and artificially create catalytic action in a catalyst-free chemical reaction comprising:

transmitting radio frequency waves through the reaction mixture at a signal strength sufficient to electronically reproduce the effect of the physical presence of a selected inert metallic catalyst,

wherein the radio frequency waves have a selected transmission frequency substantially equal to the signal frequency of said selected inert metallic catalyst as determined by nuclear magnetic resonance.

- 13. The method of claim 12 comprising:

 fine tuning the transmission frequency while monitoring the reaction to optimize the reaction.
- 14. The method according to claim 12 comprising:
 fine tuning the signal strength while monitoring the reaction to optimize the reaction.

- 15. The method according to claim 12, wherein the catalyst-free chemical reaction is electrolysis carried out within an electrolytic cell comprising a cathode and an anode, each communicating with a source of electrical current and each immersed in an electrolyte substance.
- 16. The method according to claim 15, wherein the radio frequency waves are transmitted via a standing wave antennae submerged in the electrolyte.
- 17. The method according to claim 16, wherein the electrolytic cell is housed within a conduit and electrolyte is pumped through the conduit.
- 18. The method according to claim 17, further including the step of regulating the temperature of the electrolyte to optimize the reaction.
- 19. The method according to claim 17, wherein the electrolyte is water and the reaction comprises electrolysis to increase the dissolved oxygen gas within the water.
- 20. The method according to claim 19, further including the step of monitoring the dissolved oxygen concentration of the water passed from the electrolytic cell.
- 21. The method according to claim 12, wherein the selected catalyst is selected from the group consisting of platinum, rhenium, iridium, and ruthenium.
- 22. The method according to claim 21, wherein the selected catalyst is platinum and the transmission frequency is in the order of 9.29 megahertz.
- 23. Super-oxygenated water comprising stabilized dissolved oxygen atom at a concentration of greater than 9.5 milligrams per litre

- 24. A medicinal solution containing super-oxygenated water as defined in claim 23, said solution being selected from the group consisting of: intravenous solution; electrolytic solution; saline solution; topical burn solution; topical skin treatment solution; oral rinse treatment solution; dental rinse treatment solution; ingestible blood oxygen content elevating solutions; ingestible blood oxygen partial pressure elevating solutions; bactericide; virus killing solution; anaerobic tumour treatment solution; physical injury immersion treatment solution; and brain tissue treatment solution.
- 25. A medicinal solution as defined in claim 24, wherein said solution is saline solution.
- 26. A preservative containing super-oxygenated water as defined in claim 23, said preservative being selected from the group consisting of fluid preservative; ice for use as a cooling preservative; live human organ preservative; and live human tissue preservative.
- 27. The use of super-oxygenated water as defined in claim 23 for the manufacture of a medicinal solution selected from the group consisting of: intravenous solution; electrolytic solution; saline solution; topical burn solution; topical skin treatment solution; oral rinse treatment solution; dental rinse treatment solution; ingestible blood oxygen content elevating solutions; ingestible blood oxygen partial pressure elevating solutions; bactericide; virus killing solution; anaerobic tumour treatment solution; physical injury immersion treatment solution; and brain tissue treatment solution.
- 28. The use of super-oxygenated water as defined in claim 23 for the manufacture of a preservative selected from the group consisting of: fluid preservative; ice used as a cooling preservative; live human organ preservative; and live human tissue preservative.